



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,818	08/13/2001	Eric N. Mann	0325.00484	8343

21363            7590            09/25/2002  
CHRISTOPHER P. MAIORANA, P.C.  
24025 GREATER MACK  
SUITE 200  
ST. CLAIR SHORES, MI 48080

EXAMINER	
COX, CASSANDRA F	
ART UNIT	PAPER NUMBER

2816

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/928,818	MANN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cassandra Cox	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 7/8/02.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3 and 13-15 is/are rejected.
- 7) Claim(s) 2,4-12 and 16-20 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 August 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### **Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### **Attachment(s)**

- |                                                                                                       |                                                                             |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                           | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fernsler et al. (U.S. Patent No. 5,223,931).

In reference to claim 1, Fernsler discloses in Figure 1 an apparatus comprising a first circuit (12) configured to generate a second reference signal (17) in response to (i) a first reference signal (11) and (ii) a timing signal (19), wherein a frequency and a phase of the second reference signal (19) are adjusted in response to the first reference signal (11) and (ii) held when the first reference signal (11) is lost; and a second circuit (24) configured to generate one or more output signals (27/35) in response to the second reference signal (17/23) and one of the one or more output signals (27/35), wherein the one or more output signals has a controlled and/or substantially zero delay with respect to the. The same applies to claims 13 and 14 (wherein the output signal has a controlled and/or substantially zero delay with respect to the second reference signal).

In reference to claim 3, Fernsler discloses that the second circuit comprises a phase locked loop (24) configured to generate a clock signal (27) in response to the second reference signal (23) and the one or more output signals (35); and a buffer

circuit (34) configured to generate the one or more output signals (35) in response to the clock signal (27).

In reference to claim 15, Fernsler discloses that the second reference signal (17) is phase locked to the first reference signal (11).

***Allowable Subject Matter***

3. Claims 2, 4-12, and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

1. The following is a statement of reasons for the indication of allowable subject matter: Claims 2, 7-8 are allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the first circuit (110) comprises an oscillator 122 configured to generate the second reference signal (REF) in response to the control signal (Ctrl) and the timing signal (Xin) in combination with the rest of the limitations of the base claim and any intervening claims. Claim 4 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the second circuit (112) further includes a divide-by-N circuit (170) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 5 and 10 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the PLL (140) is an analog circuit in combination with the rest of the limitations of the base claim and any intervening claims. Claims 6 and 17-18 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the first circuit (110) comprises a digitally

controlled reference loop circuit in combination with the rest of the limitations of the base claims and any intervening claims. Claim 9 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 4 wherein the first reference signal comprises an external timing signal (Xtal) in combination with the rest of the limitations of the base claims and any intervening claims. Claim 20 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the oscillator (130) comprises a voltage controlled crystal oscillator in combination with the rest of the limitations of the base claims and any intervening claims. Claims 11 and 16 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the first circuit (110) further comprises a divide-by-N circuit (160) in combination with the rest of the limitations of the base claims and any intervening claims. Claim 12 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the apparatus is implemented on a single integrated circuit chip (100).

***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 703-306-5735. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and on alternate Fridays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (703)-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



CC

September 23, 2002

Toan Tran  
Primary Examiner